

#### Anti-IFNg Reference Antibody (emapalumab) Recombinant Antibody

Catalog # APR10560

# Specification

# Anti-IFNg Reference Antibody (emapalumab) - Product Information

Application Primary Accession Reactivity Clonality Isotype Calculated MW FC, E, FTA <u>P01579</u> Cynomolgus, Human Monoclonal IgG1 145.68 KDa

## Anti-IFNg Reference Antibody (emapalumab) - Additional Information

Target/Specificity IFNg

**Endotoxin** < 0.001EU/ μg,determined by LAL method.

Conjugation Unconjugated

Expression system CHO Cell

Format

Purified monoclonal antibody supplied in PBS, pH6.0, without preservative. This antibody is purified through a protein A column.

## Anti-IFNg Reference Antibody (emapalumab) - Protein Information

Name IFNG

#### Function

Type II interferon produced by immune cells such as T-cells and NK cells that plays crucial roles in antimicrobial, antiviral, and antitumor responses by activating effector immune cells and enhancing antigen presentation (PubMed:<a href="http://www.uniprot.org/citations/16914093" target="\_blank">16914093</a>, PubMed:<a href="http://www.uniprot.org/citations/8666937" target="\_blank">8666937</a>). Primarily signals through the JAK-STAT pathway after interaction with its receptor IFNGR1 to affect gene regulation (PubMed:<a

href="http://www.uniprot.org/citations/8349687" target="\_blank">8349687</a>). Upon IFNG binding, IFNGR1 intracellular domain opens out to allow association of downstream signaling components JAK2, JAK1 and STAT1, leading to STAT1 activation, nuclear translocation and transcription of IFNG-regulated genes. Many of the induced genes are transcription factors such as IRF1 that are able to further drive regulation of a next wave of transcription (PubMed:<a href="http://www.uniprot.org/citations/16914093" target="\_blank">16914093</a>). Plays a role



in class I antigen presentation pathway by inducing a replacement of catalytic proteasome subunits with immunoproteasome subunits (PubMed:<a

href="http://www.uniprot.org/citations/8666937" target="\_blank">8666937</a>). In turn, increases the quantity, quality, and repertoire of peptides for class I MHC loading (PubMed:<a href="http://www.uniprot.org/citations/8163024" target="\_blank">8163024</a>). Increases the efficiency of peptide generation also by inducing the expression of activator PA28 that associates with the proteasome and alters its proteolytic cleavage preference (PubMed:<a

href="http://www.uniprot.org/citations/11112687" target="\_blank">11112687</a>). Up-regulates as well MHC II complexes on the cell surface by promoting expression of several key molecules such as cathepsins B/CTSB, H/CTSH, and L/CTSL (PubMed:<a

href="http://www.uniprot.org/citations/7729559" target="\_blank">7729559</a>). Participates in the regulation of hematopoietic stem cells during development and under homeostatic conditions by affecting their development, quiescence, and differentiation (By similarity).

Cellular Location Secreted.

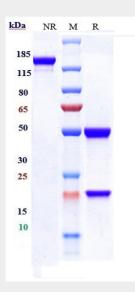
**Tissue Location** Released primarily from activated T lymphocytes.

## Anti-IFNg Reference Antibody (emapalumab) - Protocols

Provided below are standard protocols that you may find useful for product applications.

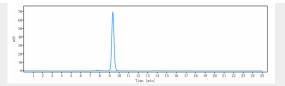
- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-IFNg Reference Antibody (emapalumab) - Images



Anti-IFNg Reference Antibody (emapalumab) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%





The purity of Anti-IFNg Reference Antibody (emapalumab)is more than 99% ,determined by SEC-HPLC.